Amendments to the Claims

Please amend the claims as indicated below. All claims are listed below, with

amended claims so marked. This listing of claims will replace all prior versions, and

listings, of claims in the application:

1.   (Currently Amended)   A communication protocol for initiating a

communication session through a network translation device which translates internal

network traffic having [an] non-routable internal origin addresses and ports into

external network traffic having [an apparent] a routable external origin address and

associated external ports, the method [protocol] comprising:

preparing a session setup for a session between [from] a first machine and a

second machine, the session setup identifying a [having the] non-routable internal

origin [network] address and an internal port to which the first machine will listen for a

response to the session setup [to a second machine, the session setup indicating a

non-routable address to which to send a session acknowledgement]; and

sending the session setup to the second machine through the network translation

device using the internal port so as to prime the network translation device for receiving

the response to the session setup;

wherein said network translation device does not modify [translate] the session

setup, [;] and wherein the second machine is configured to inspect the session setup

and identify if the session setup includes the non-routable internal origin address.

2.   (Currently Amended)   The protocol of claim 1, further comprising:

[including a first port in said session setup for communicating with a

communication endpoint;]

wherein translation by the network translation device results in network traffic

[the session setup] having the external [an apparent] origin address and an external

[a second] port different from the non-routable internal origin address and the internal

[first] port in said session setup [, and

wherein the second machine is configured to inspect said protocol data and

identify the non-routable address].

3.   (Currently Amended)   The protocol of claim 2, further comprising:

registering the first and the second machines with [wherein said endpoint is a

selected one of: the second machine, and] a registration server for registering

communication endpoints.

4.   (Currently Amended)   The protocol of claim 1 [further comprising]

wherein said sending the session setup includes the network address translation device

performing:

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receiving the session setup for the session [to the second machine];

sending the session setup to the second <u>machine</u> [network address];

recording said sending in an access authorization table;

receiving data from a network; and

comparing said received data with at least a portion of the access authorization

table the entry to determine if said received data is responsive to said sending <u>the</u>

<u>session setup</u>.

    5.   (Currently Amended)   The protocol of claim 1, wherein <u>the session</u>

<u>setup includes an alias for the first machine and wherein</u> the second machine is a

registration server for registering machine aliases with network addresses, the protocol

further comprising the registration server:

receiving the session setup, said session setup [comprising said protocol data]

including an alias for the first machine;

examining <u>the session setup</u> [said protocol data so as] to identify whether [it]

<u>the session setup</u> comprises the non-routable <u>internal origin</u> [network] address; and

if so, registering the first machine with respect to the alias and the [routable]

<u>external origin</u> address.

    6.   (Currently Amended)   The protocol of claim 1, wherein the second

machine is an endpoint to the <u>communication</u> session, the protocol further comprising

the second machine:

receiving the session setup;

determining the session setup indicates <u>the second machine should send</u>

[sending the] <u>a</u> session acknowledgement to the non-routable <u>internal origin</u> address;

and

<u>disregarding the non-routable internal origin address identified in the session</u>

<u>setup and instead</u> sending the session acknowledgement to the first machine at the

[routable] <u>external origin</u> address.

7.   (Currently Amended)   The protocol of claim 6, further comprising the

network translation device <u>performing</u>:

receiving the <u>session</u> acknowledgement for the first machine <u>from the second</u>

<u>machine</u>; and

translating the session acknowledgement for delivery to the non-routable <u>internal</u>

<u>origin</u> address <u>using the expected response port primed by the first machine</u>.

8.   (Currently Amended)   A method for <u>a registration server to facilitate</u>

communicating between a first endpoint behind a network address translator (NAT) and

a second endpoint, comprising:

receiving a first registration for the first endpoint, said registration comprising an

embedded address, embedded port <u>primed by the first endpoint</u> and embedded alias for

the first endpoint, wherein said registration has an apparent origin address of the NAT;

determining the embedded network address is a non-routable address; and

registering the first endpoint with the apparent origin address, embedded port,

and embedded alias.

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9.   (Original)   The method of claim 8, further comprising:

receiving from the second endpoint a resolution request for the alias;

replying to said request with at least the apparent origin address;

receiving a session setup from the second endpoint; and

forwarding the session setup to the first endpoint at the apparent origin address.

10.   (Original)   The method of claim 9, further comprising:

sending an acknowledgement through the NAT to the second endpoint, the

acknowledgement comprising the non-routable address and a dynamically assigned

port of the first endpoint;

determining by the second endpoint whether the second network address is

routable; and

if so, waiting by the second endpoint for audiovisual data to be sent to the

second endpoint from the first endpoint.

11.   (Currently Amended) An apparatus for initiating a session through a

network translation device that does not translate protocol data, said apparatus

comprising a readable medium having instructions encoded thereon for execution by a

processor, said instructions capable of directing the processor to perform:

preparing a session setup for a session between [from] a first machine and a

second machine, the first machine having a [the] non-routable internal origin

[network] address and an internal port to which the first machine will listen for a

response from the second machine [to a second machine, the session setup indicating

a non-routable address to which to send a session acknowledgement]; and

sending the session setup through the network translation device using the

internal port so as to prime the network translation device for receiving the response

from the second machine, wherein the [to a] second machine is configured to inspect

the session setup to identify if the session setup includes non-routable internal origin

addresses.

12.   (Original) The apparatus of claim 11, said instructions including further

instructions capable of directing the processor to perform:

including a first port in said session setup for communicating with a

communication endpoint;

wherein translation by the network translation device results in the session setup

having an apparent origin and a second port different from the non-routable address

and the first port in said session setup, and wherein the second machine is configured

to inspect said protocol data and identify the non-routable address.

13.   (Currently Amended)   The apparatus of claim 12, further comprising:

registering the first and the second machines with [wherein said endpoint is a

selected one of: the second machine, and] a registration server for registering

communication endpoints.

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14.   (Currently Amended)   The apparatus of claim 11, said instructions including further instructions capable of directing the processor to perform:

receiving the session setup for the session [to the second machine];

sending the session setup to the second <u>machine</u> [network address];

recording said sending in an access authorization table;

receiving data from a network; and

comparing said received data with at least a portion of the access authorization table the entry to determine if said received data is responsive to said sending.

15.   (Currently Amended)   The apparatus of claim 11, wherein the second machine is a registration server for registering machine aliases with network addresses, said instructions including further instructions capable of directing the processor to perform:

receiving the session setup[, said session setup comprising said protocol data including an alias for the first machine];

examining <u>the session setup</u> [said protocol data so as] to identify whether [it] <u>the session setup</u> comprises the non-routable <u>internal origin</u> [network] address; and

if so, registering the first machine with respect to the alias and the [routable] <u>external origin</u> address.

16.   (Currently Amended) The apparatus of claim 11, wherein the second machine is an endpoint to the session, said instructions including further instructions capable of directing the processor to perform:

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receiving the session setup;

determining the session setup indicates sending a [the] session

acknowledgement to the non-routable address; and

sending the session acknowledgement to the first machine at the routable

address.

17.   (Currently Amended) The apparatus of claim 16, said instructions

including further instructions capable of directing the processor to perform:

receiving a [the] acknowledgement for the first machine; and

translating the session acknowledgement for delivery to the non-routable

address.

18.   (Currently Amended)   An apparatus for a registration server to

facilitate communicating between a first endpoint behind a network address translator

(NAT) and a second endpoint, said apparatus comprising a readable medium having

instructions encoded thereon for execution by a processor, said instructions capable of

directing the processor to perform:

receiving a first registration for the first endpoint, said registration comprising an

embedded address, embedded port primed by the first endpoint and embedded alias for

the first endpoint, wherein said registration has an apparent origin address of the NAT;

determining the embedded network address is a non-routable address; and

registering the first endpoint with the apparent origin address, embedded port,

and embedded alias.

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19.   (Original)   The apparatus of claim 18, said instructions including further instructions capable of directing the processor to perform:

receiving from the second endpoint a resolution request for the alias;

replying to said request with at least the apparent origin address;

receiving a session setup from the second endpoint; and

forwarding the session setup to the first endpoint at the apparent origin address.

20.   (Original)   The apparatus of claim 19, said instructions including further instructions capable of directing the processor to perform:

sending an acknowledgement through the NAT to the second endpoint, the acknowledgement comprising the non-routable address and a dynamically assigned port of the first endpoint;

determining by the second endpoint whether the second network address is routable; and

if so, waiting by the second endpoint for audiovisual data to be sent to the second endpoint from the first endpoint.

21.   (Original) A method for a first endpoint internal to a network translation device to set up a communication session with a second endpoint external to the network translation device, the method comprising:

contacting a registration server to resolve an alias for the second endpoint;

receiving a first session registration from the registration server, the first session registration comprising a network address for the second endpoint that is routable, and

a content port to which content should be sent to for the second endpoint; and

priming the network translation device, by sending at least one network packet to

the second endpoint at the routable address on the content port, before completing

setting up the communication session with the second endpoint.

22.   (Original) The method of claim 21, further comprising:

sending a second session registration for the first endpoint to the registration

server, the second session registration comprising a network address for the first

endpoint that is non-routable.

23.   (Original) The method of claim 22, further comprising the registration

server:

receiving the second session registration for the first endpoint from a routable

network address associated with the network translation device;

identifying that the second session registration comprises a network address that

is non-routable, and responsive thereto, registering the first endpoint with respect to the

routable network address associated with the network translation device;

receiving the first session registration for the second endpoint; and

identifying that the second session registration comprises a network address that

is routable, and responsive thereto, registering the first endpoint in accord with the first

session registration.

24.   (Original) The method of claim 22, further comprising:

wherein the registration server is configured to identify the non-routable network address within the second session registration, and responsive to said identifying, registering the first endpoint with respect to a routable address associated with the network translation device.

25.   (Original)   An apparatus for a first endpoint internal to a network translation device to set up a communication session with a second endpoint external to the network translation device, said apparatus comprising a readable medium having instructions encoded thereon for execution by a processor, said instructions capable of directing the processor to perform:

contacting a registration server to resolve an alias for the second endpoint;

receiving a first session registration from the registration server, the first session registration comprising a network address for the second endpoint that is routable, and a content port to which content should be sent to for the second endpoint; and

priming the network translation device, by sending at least one network packet to the second endpoint at the routable address on the content port, before completing setting up the communication session with the second endpoint.

26.   (Original)   The apparatus of claim 25, said instructions including further instructions capable of directing the processor to perform:

sending a second session registration for the first endpoint to the registration server, the second session registration comprising a network address for the first endpoint that is non-routable.

27.   (Original)   The apparatus of claim 26, said instructions including further instructions capable of directing the processor to perform:

receiving the second session registration for the first endpoint from a routable network address associated with the network translation device;

identifying that the second session registration comprises a network address that is non-routable, and responsive thereto, registering the first endpoint with respect to the routable network address associated with the network translation device;

receiving the first session registration for the second endpoint; and

identifying that the second session registration comprises a network address that is routable, and responsive thereto, registering the first endpoint in accord with the first session registration.

28.   (Original)   An apparatus for a first endpoint internal to a network translation device to set up a communication session with a second endpoint external to the network translation device, said apparatus comprising:

resolving means for contacting a registration server to resolve an alias for the second endpoint;

receiving means for receiving a first session registration from the registration server, the first session registration comprising a network address for the second endpoint that is routable, and a content port to which content should be sent to for the second endpoint; and

priming means for priming the network translation device, by sending at least one

network packet to the second endpoint at the routable address on the content port,

before completing setting up the communication session with the second endpoint.

29.   (Original)   The apparatus of claim 28, further comprising:

sending means for sending a second session registration for the first endpoint to

the registration server, the second session registration comprising a network address

for the first endpoint that is non-routable.

30.   (Original)   The apparatus of claim 29, further comprising:

receiving means for receiving the second session registration for the first

endpoint from a routable network address associated with the network translation

device;

identifying means for identifying that the second session registration comprises a

network address that is non-routable, and responsive thereto, registering the first

endpoint with respect to the routable network address associated with the network

translation device;

receiving means for receiving the first session registration for the second

endpoint; and

identifying means for identifying that the second session registration comprises a

network address that is routable, and responsive thereto, registering the first endpoint in

accord with the first session registration.